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## Remarks

Claims 1-16, 18, 20, 21, 28-33, 38-43 and 46-56 are currently pending in this application. Claims 1-2, 13, 15-16, 18, 30-31, 38, and 46-47 have been amended herein, and claims 17, 19, 22-27, 34-37, and 44-45 have been cancelled without prejudice or disclaimer. A clean version of amendments to the specification, the abstract and all pending claims is found at pages 2-18, and a marked up version showing changes made is found at 20-24. Entry and consideration of this preliminary amendment is respectfully requested prior to performing substantive examination of the subject patent application.

As noted above, this preliminary amendment is being filed concurrently with a Reply to Notice of Missing Parts, and a Request for Approval of Drawing Changes.

If any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063.

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number listed below.

> Respectfully submitted, AMIN & TUROCY, LLP

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# VERSION WITH MARKINGS TO SHOW CHANGES MADE TO SPECIFICATION, ABSTRACT, DRAWINGS AND CLAIMS

## In the Specification:

Please amend the specification as follows:

At page 4, lines 26 and 27, replace "can" with --may--.

At page 7, line 21, replace "and thus" with -- which may be used--.

At page 7, line 30, replace "can" with --may--.

At page 8, line 4, replace "may" with --may be further processed to--.

At page 8, line 21, replace "an answer" with --a response--.

At page 10, line 18, replace "an answer" with --a response--.

At page 10, lines 18, 21, and 25, replace "answer" with --response--.

At page 12, line 6, replace "can" with --may--.

At page 12, line 7, replace "models" with --may model--.

At page 12, line 31, replace "can further" with --may further--.

At page 13, lines 31-31 to page 14 lines 1-2, remove the following:

"Thus rather than returning a document that contains the words 'deepest', 'lake', and 'Canada', which forces the information consumer to read through one or more documents to figure out whether the query was answer, the run time system 200 can provide information."

At page 14, line 13, replace "can be" with --may be--.

At page 14, line 22, replace "an answer" with --a response--.

At page 20, lines 2-4, remove the following:

"rather than returning documents containing matching keywords, thus providing an advantage over conventional information retrieval systems."

At page 20, lines 4 and 11, replace "can" with --may--.

At page 26, line 21, replace "can" with --may--.

#### In the Abstract:

Please amend the Abstract as follows:

At page 42, line 6, replace "an answer" with --a response--.

At page 42, line 6, delete "and/or rephrased queries or sample queries".

## In the Drawings:

Please correct Figs. 1-2 as indicated in red ink in the Request for Approval of Drawing Changes filed concurrently herewith. In particular, please amend the text in blocks 114 and 214 by replacing "ANSWER GENERATOR" with –RESPONSE GENERATOR--.

## In the Claims:

Please cancel claims 17, 19, 22-27, 34-37, and 44-45 without prejudice or disclaimer. Please amend claims 1-2, 13, 15-16, 18, 30-31, 38, and 46-47 as follows:

(Amended) A system for inferring an information goal, comprising:

 a query subsystem adapted to receive at least one of a [new] query and [a new] an extrinsic data, the query subsystem being operatively coupled to an inference model and a knowledge data store, the query subsystem comprising:

a natural language processor adapted to parse the [new] query; and an inference engine adapted to infer one or more informational goals based, at least in part, on at least one of the [new] query, the [new] extrinsic data and an inference data stored in the inference model.

- 2. (Amended) The system of claim 1, where the informational goals include at least one of, a type of information requested in the [new] query, a topic of the [new] query, a focal point of the [new] query, an age of a person presenting a query to the system and one or more levels of detail desired in a response to the [new] query.
- 13. (Amended) The system of claim 3, where the natural language processor is further adapted to parse a [new] query into one or more parts suitable for retrieving one or more

conditional probabilities stored in the inference model.

- 15. (Amended) The system of claim 14, the inference engine further adapted to infer one or more informational goals based, at least in part, on at least one of the [new] query, the [new] extrinsic data, the one or more parts, and the one or more conditional probabilities stored in the inference model.
- 16. (Amended) The system of claim 3, the query subsystem further comprising: an answer generator adapted to produce [one or more responses] a response to the [new] query [where the one or more responses are based, at least in part, on the inferred informational goals].
- 18. (Amended) The system of claim [17] <u>16</u>, where the answer generator [is further adapted to produce at least one of an answer responsive to the new query, a rephrase query, a query that can be employed in query by example processing and] <u>produces</u> an error [code] message.
- 30. (Amended) A method for [answering questions] generating responses comprising: inputting a question;
  - employing natural language processing to parse the question;
- employing parse data produced by parsing the question to access a decision model, the decision model storing conditional probabilities associated with informational goals;
- inferring one or more informational goals; and producing an output related to the question and the one or more inferred informational goals.
- 31. (Amended) The method of claim 30, where parsing the question can produce parse data from which at least one of, the existence of relationships between linguistic components in the question, the nature of relationships between linguistic components in

the question, parts of speech in the question, logical forms of words in the question, logical forms of phrases in the question, structural features in the question, the number of distinct [points] <u>parts</u> of speech in the question, whether the main noun in the question is singular and whether the question contains a proper noun, can be extracted.

- 38. (Amended) The method of claim [37] <u>33</u>, where inferring the one or more informational goals further comprises inferring one or more levels of detail for [an answer] <u>a response</u> to the question[, where inferring the one or more levels of detail for an answer comprised considering at least one of, the age of a user, the physical location of a user, one or more relationships in which the user is engaged and an application being employed by the user].
- 46. (Amended) A computer readable medium storing computer executable instructions operable to perform a method for answering questions, the method comprising:

inputting a question;

employing natural language processing to parse the question;

employing parse data produced by parsing the question to access a decision model, the decision model storing conditional probabilities associated with informational goals;

inferring one or more informational goals; and producing an output [related] to the question [and] <u>based on</u> the one or more inferred informational goals.

47. (Amended) A system for [answering] generating a response for a question posed to an automated question answerer comprising:

means for initializing a model representing the likelihood that a certain type of answer is desired, the model being stored in one or more data repositories;

means for decomposing a question into parts that facilitate accessing the model; manual means for adapting the model; automated means for adapting the model; and
means for [retrieving one or more answers] constructing one or more responses to
the question based on likelihoods retrieved from accessing the model.